

WEAPON SYSTEM COST SUMMARY FACT SHEET

As of June 30, 1970

(Millions of Dollars)

Weapon System	(1)			(2)		(3)			(4)		(5)		(6)	
	Development Estimate Total Program			Quantity Change		Adjusted Development Estimate Total Program			Other Cost Growth		Current Estimate Total Program		Cost Changes in Current Estimate This Quarter	
	Quantity	Cost		Quantity	Cost	Quantity	Cost		Total	Pct. *	Total	Unit	Total	Unit
	(a)	(b)	(c)	(a)	(b)	(a)	(b)	(c)	(a)	(b)	(a)	(b)	(a)	(b)
ARMY														
CHEYENNE (R&D)	-	\$ 126	\$ -	0	\$ 0	-	\$ 126	\$ -	\$+ 76	60%	\$ 202	\$ -	\$ 0	\$ 0
LANCE (Battalions)	7	653	93.0	0	0	7	653	93.0	+ 108	17	761	108.2	+ 26	- 3.8
MBT-70	3,744	2,091	.56	-1,344	- 602	2,400	1,485	.62	+ 337	23	1,826	.76	- 314	- .123
SAFEGUARD														
Phase I	2	4,185	2.092B		+ 20		4,205	-	+ 389	9	4,594	2.297B	0	0
Mod. Phase II		1,345	-		0		1,345	-	0	0	1,345	1.979B	0	0
SAM-D (Battery)	124	3,989	32.2	- 75	-1,791	49	2,198	45.0	+1,216	55	3,414	69.7	- 83	+ 2.9
SHERIDAN	1,736	376	.216	- 66	- 13	1,670	363	.219	+ 93	26	456	.273	- 42	+ .005
SHILLELAGH	99,362	357	.004	-10,151	- 18	89,211	339	.004	+ 157	46	496	.006	0	0
NAVY														
A-7E	595	1,466	2.463	- 174	- 385	421	1,081	2.566	+ 494	46	1,575	3.740	+ 5	+ .012
F-14	469	6,166	13.146	+ 253	+2,036	722	8,202	11.360	+ 77	1	8,279	11.466	-	-
P-3C	104	1,294	12.444	+ 88	+ 971	192	2,265	11.798	+ 286	13	2,551	13.286	- 2	- .010
S-3A	199	2,891	14.528	-	-	199	2,891	14.528	+ 43	1	2,934	14.743	+ 2	+ .011
CONDOR	3,348	441	.132	-2,570	- 221	778	220	.283	+ 131	60	351	.452	-	-
PHOENIX	2,384	677	.284	+1,195	+ 216E	3,579	893	.250	+ 608E	68	1,501	.419	-	-
POSEIDON	31B	4,569	147.377	-C/	- 244E/	31	4,325	139.519	+ 790	18	5,115	165.009	- 440	-14.191
SPARROW III E	35,077	741	.021	-26,515	- 460	8,562	281	.033	+ 12	4	293	.034	+ 2	-
SPARROW III F	10,785	454	.042	+1,434	+ 114	12,219	568	.047	+ 490	86	1,058	.087	+ 56	+ .005
MX 48 Mod 0/1/2	5,450	714	.131	+ 437	+ 489	5,887	1,203	.204	+2,554	212	3,757	.638	+ 2	-
SEN-888	10B	1,658	165.800	+ 15	+2,376	25	4,034	161.360	+ 246	6	4,280	171.188	-	-
DD-943	30	2,581	86.040	+ 20	+1,596	50	4,177	83.532	-	-	4,177	83.532	-	-
DLGN-38	4B	769	192.300	+ 19	+3,211	23	3,980	173.043	+1,510	38	5,490	238.705	+ 615	+26.735
LHA	9	1,380	153.366	-	-	9	1,380	153.366	+ 48	3	1,428	158.644	-	-
CVAN 68	1B	428	427.500	-	-	1	428	427.500	+ 116	27	544	544.200	-	-
CVAN 69	1B	519	519.000	-	-	1	519	519.000	-	-	519	519.000	-	-
AIR FORCE														
A-7D	517	1,379	2.670	- 130	- 282	387	1,097	2.830	+ 303	+ 28	1,400	3.620	+ 2	+ 0.01
B-1	246	10,108	41.089	-	-	246	10,108	41.089	-	-	10,108	41.089	+ 731	+ 2.17
C-5A	120	3,413	28.440	- 39	- 736	51	2,677	33.050	+1,632	+ 61	4,309	53.190	- 1	- 0.02
F-15	749	7,355	9.820	-	-	749	7,355	9.820	+ 1	E/	7,356	9.820	+ 1	-
F-111A/D/E/F	1,388	5,505	3.970	- 934	-2,581	454	2,924	6.440	+3,457	+ 118	6,381	14.050	-	+ 0.47
FB-111A	264	1,781	6.750	- 187	-1,043	77	738	9.590	+ 469	+ 64	1,207	15.670	-	-
AWACS	42	2,662	63.370	-	-	42	2,662	63.370	-	-	2,662	63.370	+ 507	+14.22
MAVERICK	17,205	384	.022	-6,000	- 74	11,205	310	.028	+ 34	+ 11	344	.031	+ 6	+ .001
MINUTEMAN II	666	4,255	6.385	+ 2	+ 4	668	4,259	6.375	+ 207	+ 5	4,466	6.035	- 279	- .410
MINUTEMAN III	760	4,674	6.150	- 21	- 38	739	4,626	6.273	+ 999	+ 22	5,635	7.625	+ 266	+ .37
SRAM	700	237	.338	+1,200	+ 118	1,900	355	.187	+ 736	+ 207	1,091	.574	-	-
SPARROW III E	22,740 G	529	.023	-8,797	- 205	13,943	324	.023	+ 36	+ 11	360	.026	-	-
SPARROW III F	375 G	12	.031	+ 325	+ 10	700	22	.031	+ 44	+ 203	60	.004	-	-
PROGRAM COST SUMMARY														
Army		\$13,122			\$-2,404		\$10,718		\$+2,376	+22%	\$ 13,094		\$- 413	
Navy		26,748			+9,699		36,447		+7,405	+20	43,852		+ 240	
Air Force		+2,294			-4,827		37,467		+7,218	+21	45,355		+1,323	
Grand Total		\$82,164			\$+2,468		\$84,632		\$+17,699	+21%	\$102,331		\$+1,150	

FOOTNOTES

* Column 4a divided by Column 3b.

a/ Planning Estimate, Unit Cost is "cost per site," includes Perimeter Acquisition Radar, Missile Site Radar, missiles, etc.

b/ Includes 31 SSBN's and accompanying missiles, tenders, and range ships.

c/ Cost change due to reduction in number of missiles and range ships within the 31 SSBN force.

d/ Planning estimate; validation not completed.

e/ Total Cost change only reported; distribution between quantity change and other cost growth estimated.

f/ Less than 0.5%.

g/ Planning Estimate; Development Estimate not applicable since Navy is procuring agency.

Source: Selected Acquisition Reports--As of June 30, 1970.

Highlights of June 30, 1970 Selected Acquisition Reports

The table presented on the opposite page reflects comparative data, by weapon system and in terms of program quantity and program acquisition cost, for all weapon systems currently reported each quarter to the Senate Preparedness Investigating Subcommittee (Stennis Committee). In general, the table reflects for each weapon system a comparison between the baseline or Development Estimate (DE) of the total program (Col. 1) and the Current Estimate (CE) of the

total program (Col. 5), identifying differences between the two estimates in terms of changes due solely to quantity adjustments (Col. 2) and changes due to all other reasons for cost growth (Col. 4). In addition, an Adjusted Development Estimate (Col. 3), based on Col. 1 plus or minus Col. 2, and Cost Changes in the Current Estimate This Quarter (Col. 6) are shown for comparative purposes. Each column is more specifically defined in the insert below.

Specific comments on those weapon systems which experienced significant cost changes since the previous quarter follow:

LANCE - The current estimate for LANCE increased \$26M, \$20M of which is due to a production program stretchout. This stretchout was caused by funding constraints. Correction of an omission from previous estimates added \$6M.

MBT-70 - The net reduction of \$314M in Program Acquisition Costs is due to the transfer of Replenishment Spares, Production Base Support, First Destination Transportation and Trainers from Program Acquisition Costs to Additional Procurement Costs. This was partially offset by the inclusion of Peculiar Support Equipment, Technical data documentation and Test and Evaluation costs.

SAM-D - The reduction of \$83M in the current estimate was due to the transfer of Production Base Support and First Destination Transportation costs from Program Acquisition Costs to the Additional Procurement Costs.

SHERIDAN - The reduction of \$42M includes \$32M due to transferring the cost of Production Base Support, First Destination Transportation and the Weapon System Trainer from Program Acquisition Costs to Additional Procurement Costs. The remainder of the decrease is due to disapproval of certain planned improvements in the Vehicle Guidance and Control.

POSEIDON - The reduction of \$440M in the current estimate of Program Acquisition Cost results from a repricing adjustment of \$139M in missile production requirements and ship conversion costs and the transfer of \$301M of other procurement costs from Program Acquisition Costs to Additional Procurement Costs.

SPARROW F - The increase in the current estimate of \$56M is due to a reduction in the planned USAF procurement of the SPARROW F which increased Navy costs by causing an acceleration of the Navy production schedule and the transfer of initial spare funds previously reported in Additional Procurement Costs to Program Acquisition Costs.

DLGN-38 - Engineering changes associated with the planned installation of certain advanced pieces of equipment in the FY 73 and subsequent ships increased the current estimate by \$284M. Estimating changes caused by a change in the plan regarding the number of shipyards to be used for the program added \$55M. The remaining \$276M of the total of \$615M, is an economic change caused by a change in the baseline dollars from FY 71 to FY 72.

B-1 - The Program Acquisition Cost estimate increased \$730.7M during the quarter. Within this total \$251M results from extending economic escalation through the entire period of the development phase of the program which was placed under contract with North American Rockwell Corporation (aircraft) and General Electric (engines) on June 5, 1970. The remainder of the increase is an estimating change which provides for a margin of technical risk associated with the acquisition of the total program including the procurement phase which is not under contract. Because of contract award, a development estimate for this program is available for the first time.

AWACS - The current estimate has been updated as a result of contract award to the Boeing Corporation on July 23, 1970. The increase in the Program Acquisition Cost estimate of \$597M results primarily from extending economic escalation through the entire acquisition period for both development and procurement. The allowance for escalation which covers a period of seven years amounts to \$556M. The remaining \$41M of the increase in estimate allows for a higher technical risk than provided for in the March SAR. Because of contract award, a development estimate for this program is available for the first time.

Explanation of Columns - Summary Fact Sheet^{1/}

Column 1 - Development Estimate (DE)
Based on Col. 2 of the SAR and is estimate at the time of completion of Validation Phase.

Column 2 - Quantity Change
Based on Col. 3 of the SAR and represents the portion of cost change due to change in quantity.

Column 3 - Adjusted Development Estimate
Col. 1 of table + Col. 2.

Column 4 - Other Cost Growth
Also based on Col. 3 of the SAR and represents cost changes attributable to all other reasons except quantity (engineering, schedule, inflation, economic, etc. (Page 8/9 Encl. 1 to DODI 7000.3).

Column 5 - Current Estimate Total Program
Based on Col. 4 of the SAR and is estimate "as of" the date of the report.

Column 6 - Cost Changes during Current Quarter
Derived by calculating difference between Current Estimate of previous quarter and that of present quarter.

^{1/} Data are derived from Section E, Program Acquisition Cost, of the Selected Acquisition Report (SAR), Page 5, Enclosure 2, DODI 7000.3, dated June 12, 1970.

Source: Selected Acquisition Reports--As of June 30, 1970.

OASD(Comptroller)
Directorate for Information Operations

June 30, 1970

System	Development Estimate	Quantity Adjustment	Adjusted Development Estimate	Other Cost Growth	June 30 Current Estimate	Change In Current Estimate Since March Report
<u>NAVY</u>						
A-7E	\$ 1,466	\$ - 385	\$ 1,080	\$ + 494	\$1,575	\$ + 5
F-14	6,166	+ 1,769	7,936	+ 344	8,279	-
P-3C	1,294	+ 971	2,265	+ 286	2,551	- 2
S-3A	2,891	-	2,891	+ 43	2,934	+ 2
CONDOR	441	- 221	220	+ 131	351	-
PHOENIX	677	+ 216	893	+ 608	1,501	-
POSEIDON	4,569	244	4,325	+ 790	5,115	- 440
SPARROW E	741	- 460	281	+ 12	293	+ 2
SPARROW F (Mod)	454	+ 114	568	+ 490	1,058	+ 56
MK 48 (0/1/2)	714	+ 489	1,203	+2,554	3,757	-
SSN-688	1,658 *	+ 2,376	4,034	+ 246	4,280	+ 2
DD-963	2,581 *	+ 1,596	4,177	-	4,177	-
DLGN-38	769 *	+ 3,211	3,980	+1,510	5,490	+ 615
LHA	1,380	-	1,380	+ 48	1,428	-
CVAN 68	428 *	-	428	+ 116	544	-
CVAN 69	519 *	-	519	-	519	-
Total NAVY	\$26,748	\$ +9,432	\$36,180	\$ +7,672	\$43,852	\$ + 240
<u>AIR FORCE</u>						
F-111A/C/D/E/F	\$ 5,505	\$ -2,581	\$ 2,924	\$ +3,457	\$ 6,381	\$ -
FB-111A	1,781	-1,043	738	+ 469	1,207	-
C-5A	3,413	- 736	2,677	+1,632	4,309	- 1
A-7D	1,379	- 282	1,097	+ 303	1,400	+ 2
B-1	10,857	-	10,857	-	10,857	+1,480
F-15	7,355	-	7,355	+ 1	7,356	+ 1
AWACS	2,662	-	2,662	-	2,662	+ 597
MAVERICK	384	- 74	310	+ 34	344	+ 6
MINUTEMAN II	4,515	+ 4	4,519	+ 224	4,743	- 2
MINUTEMAN III	4,414	- 38	4,376	+ 982	5,358	- 11
SRAM	237	+ 118	355	+ 736	1,091	-
SPARROW E	529	- 204	324	+ 36	360	-
SPARROW F	12	+ 10	22	+ 44	66	-
Total AIR FORCE	\$43,043	\$ -4,827	\$38,216	\$ +7,918	\$46,134	\$ +2,072

System	Development Estimate	Quantity Adjustment	Adjusted Development Estimate	Other Cost Growth	June 30 Current Estimate	Change In Current Estimate Since March Report
<u>ARMY</u>						
SAM-D	\$ 3,989	\$ - 1,791	\$ 2,198	\$+ 1,216	\$ 3,414	\$ - 83
MBT 70	2,091	- 602	1,489	+ 337	1,826	- 314
CHEYENNE (R&D Only)	126	0	126	+ 76	202	-
LANCE	653	0	653	+ 108	761	+ 26
SHERIDAN	376	- 13	363	+ 93	456	- 42
SHILLELAGH	357	- 18	339	+ 157	496	-
SAFEGUARD						
Phase I only	4,185	+ 20	4,205	+ 389	4,594	-
Mod. Phase II	<u>1,345</u>	<u>0</u>	<u>1,345</u>	<u>0</u>	<u>1,345</u>	<u>-</u>
Total ARMY	\$13,122	\$ - 2,404	\$10,718	\$+ 2,376	\$ 13,094	\$ - 413

TOTALS

NAVY	\$26,748	\$ + 9,432	\$36,180	\$+ 7,672	\$ 43,852	\$ + 240
AIR FORCE	43,043	- 4,827	38,216	+ 7,918	46,134	+ 2,072
ARMY	<u>13,122</u>	<u>- 2,404</u>	<u>10,718</u>	<u>+ 2,376</u>	<u>13,094</u>	<u>- 413</u>
Grand Totals	\$82,913	\$ + 2,201	\$85,114	\$ 17,966	\$103,080	\$ + 1,899

*Planning Estimate used - No Development Estimate available

Selected Acquisition Reports, as of June 30, 1970
Distribution of Cost Growth by Category (Other than quantity Changes)

(Millions of Dollars)

Weapon System	Engineering	Support	Schedule	Economic	Estimating	Unpredictable	Other ^{a/}	Weapon System Total
ARMY								
CHEYENNE	\$ 30	\$ 7	\$ -	\$ -	\$ 32	\$ 7	\$ -	\$ 76
LANCE	-	7	50	20	21	10	-	108
MBT-70	- 24	102	87	162	- 9	-	19	337
SAFEGUARD (Phase I)	6	34	137	136	76	-	-	389
SAM-D	10	- 2	109	145	944	-	10	1,216
SHERIDAN	68	1	11	5	8	-	-	93
SHILLELAGH	39	5	12	42	59	-	-	157
TOTAL ARMY	129	154	406	510	1,131	17	29	2,376
NAVY								
A-7E	-	2	487	-	5	-	-	494
F-14	-	-	6	-	40	298	-	344
P-3C	- 28	-110	268	149	-	-	7	286
S-3A	- 20	7	-	-	56	-	-	43
CONDOR	12	-	16	34	69	-	-	131
PHOENIX	11	-	169	-	-	313	115	608
POSEIDON	30	- 20	23	193 ^{b/}	564 ^{b/}	-	-	790
SPARROW E	6	-	3	11	- 8	-	-	12
SPARROW F	3	8	262	78	102	37	-	490
MK 48	21	46	-	2	2,467	-	18	2,554
SSN 688	-	-	-	246	-	-	-	246
DD 963	-	-	-	-	-	-	-	-
DLGN-38	-	-	-	-	1,510	-	-	1,510
LHA	-	-	-	-	48	-	-	48
CVAN 68	-	-	-	-	116	-	-	116
CVAN 69	-	-	-	-	-	-	-	-
TOTAL NAVY	35	- 67	1,234	713	4,969	648	140	7,672
AIR FORCE								
A-7D	152	57	50	35	9	-	-	303
B-1	-	-	-	-	-	-	-	-
C-5A	266	233	21	411	301	-	400	1,632
F-15	-	1	-	-	-	-	-	1
F-111A/D/E/F	1,432	534	644	228	619	-	-	3,457
FB-111A	160	117	103	38	51	-	-	469
AWACS	-	-	-	-	-	-	-	-
MAVERICK	1	3	13	9	-	-	8	34
MINUTEMAN II	210	8	31	-	- 24	-	- 1	224
MINUTEMAN III	731	80	-	95	5	71	-	982
SRAM	167	105	-	-	398	-	66	736
SPARROW E	36	-	-	-	-	-	-	36
SPARROW F	44	-	c/	-	-	-	-	44
TOTAL AIR FORCE	3,199	1,138	862	816	1,359	71	473	7,918
GRAND TOTAL	\$3,363	\$1,225	\$2,502	\$2,039	\$ 7,459	\$ 736	\$ 642	\$17,966 ^J

^{a/} Includes cost growth due to contractor overruns, contract performance incentives, contingency provisions, etc.

^{b/} POSEIDON SAR attributes \$779.4M to combined category of "Inflation and Underestimates." Breakdown shown is estimated based on 20% factor for inflation.

^{c/} Included with engineering

NOTE: Variations in category selections between the military services are attributed to the fact that this is the first report under the revised DODI 7000.3. Subsequent reports should reflect improvement.

OASD (Comptroller)
 Directorate for Information Operations
 September 9, 1970